This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-42. (Cancelled)

43. (Previously presented) A plasmid vector selected from those having sequence: SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14 and SEQ ID NO: 15.

44. (Cancelled)

45. (Cancelled)

46. (Currently amended) A host ~~cells~~ cell according to claim [[44]] 63, wherein the host ~~cells are cells of~~ cell is an *E. coli* strain K12 or an [[of]] *E. coli* strain B.

47. (Cancelled)

48. (Currently amended) A ~~Method~~ method of producing a polypeptide ~~polypeptides~~ having at least one of uridine phosphorylase enzyme activity and purine nucleoside phosphorylase enzyme activity comprising culturing host cells ~~containing a recombinant plasmid expression vector~~ according to claim [[31]] 63 under conditions to express said polypeptide.

49. (Withdrawn; Currently amended) A ~~Method~~ method of catalyzing transglycosylation reactions between a donor nucleoside and an acceptor base comprising culturing host cells ~~containing a recombinant plasmid expression vector~~ according to claim [[31]] 63.

50. (Withdrawn; Currently amended) A ~~The~~ method according to claim 49, wherein the acceptor base is a purine ~~and/or pyrimindine~~ or pyrimidine base.

51. (Withdrawn; Currently amended) A ~~The~~ method according to claim 50, wherein the purine ~~and/or~~ or pyrimidine ~~bases are~~ base is ~~selected from~~ natural or substituted ~~pyrimidine and~~

~~purine bases; purine bases substituted at at least one of the 1, 2 and 6 positions of the purine ring; pyrimidine bases substituted at at least one of the 3 and 5 positions of the pyrimidine ring; purine, 2-azapurine, 8-azapurine, 1-deazapurine (imidazopyridine), 3-deazapurine, and 7-deazapurine~~.

52. (Withdrawn; Currently amended) A ~~The~~ method according to claim 49, wherein the acceptor bases are ~~constituted by~~ heterocyclic compounds containing at least one nitrogen atom~~,~~ ~~such as, for example, imidazoles, triazoles and pyrazoles~~.

53. (Withdrawn; Currently amended) A ~~The~~ method according to claim 49, wherein the donor nucleoside is selected from nucleosides containing ~~D—ribose~~ D-ribose and 2'deoxyribose~~;~~ ~~nucleosides containing the ribose group modified in the 2', 3' and /or 5' positions; nucleosides in which the sugar is β-D-arabinose, α-L-xylose, 3'-deoxyribose, 3',5'-dideoxyribose, 2',3'-dideoxyribose, 5'-deoxyribose, 2',5'-dideoxyribose, 2'-amino-2'-deoxyribose, 3'-amino-3'-deoxyribose, 2'-fluoro-2'-deoxyribose~~.

54-57. (Cancelled)

58. (Currently Amended) A method for producing a fusion protein having the activity of both uridine phosphorylase and purine nucleoside phosphorylase enzymes, said method comprising:

~~a) producing a plasmid expression vector according to claim 40~~;

~~b~~a) ~~transforming~~ culturing a host bacteria cell according to claim 65 ~~with said expression vector~~; and

c) isolating and purifying the fusion protein from the transformed bacteria cell.

59. (Previously presented) A method according to claim 58 wherein said host bacteria cells are cells of *Escherichia coli*.

60. (Withdrawn; Previously presented) A fusion protein obtainable from the method according to claim 58.

61-62. (Cancelled)

63. (Currently Amended) A transformed prokaryotic host cell expressing 120-1000 times higher uridine phosphorylase activity, purine nucleoside phosphorylase activity, or both, than the corresponding non-transformed prokaryotic host cell, the transformed prokaryotic host cell harboring a plasmid expression vector comprising:

a) ~~at least one~~ a gene sequence of a mesophilic bacterium coding for a polypeptide having uridine phosphorylase enzyme activity, wherein said gene comprises the sequence of nucleotides 243 to 1021 of SEQ ID NO: 6 and ~~at least one~~ a gene sequence of a mesophilic bacterium coding for a polypeptide having purine nucleoside phosphorylase enzyme activity, wherein said gene comprises the sequence of nucleotides 1037 to 1766 of SEQ ID NO: 6; and

b) at least one gene sequence coding for tetracycline ~~and/or~~ or kanamycin resistance or a combination thereof.

64. (Previously presented) A transformed prokaryotic host cell according to claim 63, wherein the host cell is an *E. coli* cell.

65. (Currently amended) A host cell ~~plasmid vector~~ according to claim 63, wherein the gene sequence coding for [[a]] the polypeptide having uridine phosphorylase enzyme activity and the gene sequence coding for [[a]] the polypeptide having purine nucleoside phosphorylase enzyme activity are fused together so to express a fusion protein wherein the enzymes uridine phosphorylase and purine nucleoside phosphorylase are covalently bonded together.

66. (Currently amended) A host cell ~~plasmid vector~~ according to claim 63, wherein the gene sequence coding for a polypeptide having uridine phosphorylase enzyme activity and the gene sequence coding for a polypeptide having purine nucleoside phosphorylase enzyme activity are fused together so to express a fusion protein wherein the enzymes uridine phosphorylase and purine nucleoside phosphorylase are bonded together by a polypeptide linker of more than one amino acid.

67. (New) A host cell according to claim 63, wherein the gene sequence encoding a polypeptide having uridine phosphorylase enzyme activity, the gene sequence of a mesophilic bacterium coding for a polypeptide having purine nucleoside phosphorylase enzyme activity, a gene

sequence coding for at least one of tetracycline and kanamycin resistance, and a transcription control sequence, are cloned into plasmid pUC18.

68. (New) A host cell according to claim 63, wherein the sequence coding for tetracycline resistance is the *Tet* gene of plasmid pBR322.

69. (New) A host cell according to claim 63, wherein the sequence coding for kanamycin resistance is the *kan* gene of plasmid pET29c.

70. (New) A method for producing a fusion protein having the activity of both uridine phosphorylase and purine nucleoside phosphorylase enzymes, said method comprising:

a) culturing a host bacteria cell according to claim 66; and

c) isolating and purifying the fusion protein from the transformed bacteria cell.

71. (New) A method according to claim 52, wherein the heterocyclic compounds are selected from the group consisting of imidazoles, triazoles and pyrazoles.

72. (New) The method according to claim 51, wherein the purine bases are substituted at at least one of the 1, 2 and 6 positions of the purine ring and the pyrimidine bases are substituted at at least one of the 3 and 5 positions of the pyrimidine ring.

73. (New) The method according to claim 51, wherein the substituted purines are selected from the group consisting of purine, 2-azapurine, 8-azapurine, 1-deazapurine (imidazopyridine), 3-deazapurine, and 7-deazapurine.

74. (New) The method according to claim 49, wherein the donor nucleoside contains the ribose group modified in the 2', 3' or 5' positions.

75. (New) The method according to claim 49, wherein the sugar of the donor nucleoside is selected from the group consisting of β-D-arabinose, α-L-xylose, 3'-deoxyribose, 3',5'-dideoxyribose, 2',3'-dideoxyribose, 5'-deoxyribose, 2',5'-dideoxyribose, 2'-amino-2'-deoxyribose, 3'-amino-3'-deoxyribose, and 2'-fluoro-2'-deoxyribose.